



1. General information

Course: FIRE ECOLOGY

Type: ELECTIVE

Degree: 340 - UNDERGRADUATE DEGREE PROGRAMME IN ENVIRONMENTAL SCIENCES

Center: 501 - FACULTY OF ENVIRONMENTAL SCIENCES AND BIOCHEMISTRY

Year: 4

Main language: Spanish

Use of additional languages:

Web site:

Code: 37333

ECTS credits: 4.5

Academic year: 2019-20

Group(s): 40

Duration: First semester

Second language: English

English Friendly: Y

Bilingual: N

Lecturer: MARIA BELEN HINOJOSA CENTENO - Group(s): 40				
Building/Office	Department	Phone number	Email	Office hours
Sabatini/0.36	CIENCIAS AMBIENTALES	5470	mariabelen.hinojosa@uclm.es	Martes, miércoles y jueves de 12:00 a 14:00 horas (previa cita por e-mail)
Lecturer: TERESA ITZIAR RODRIGUEZ URBETA - Group(s): 40				
Building/Office	Department	Phone number	Email	Office hours
ICAM/0.33	CIENCIAS AMBIENTALES	5763	itziar.rodriguez@uclm.es	Martes, Miércoles y Jueves de 12.00h a 14.00h
Lecturer: IVAN TORRES GALAN - Group(s): 40				
Building/Office	Department	Phone number	Email	Office hours
Sabatini/0.35	CIENCIAS AMBIENTALES	5472	ivan.torres@uclm.es	Lunes de 11:00 a 12:00 y de 13:00 a 14:00, Martes y Jueves de 12:00 a 14:00h (previa cita por e-mail)

2. Pre-Requisites

Not established

3. Justification in the curriculum, relation to other subjects and to the profession

Not established

4. Degree competences achieved in this course

Course competences

Code	Description
CB02	Apply their knowledge to their job or vocation in a professional manner and show that they have the competences to construct and justify arguments and solve problems within their subject area.
CB03	Be able to gather and process relevant information (usually within their subject area) to give opinions, including reflections on relevant social, scientific or ethical issues.
CB04	Transmit information, ideas, problems and solutions for both specialist and non-specialist audiences.
E01	Ability to understand and apply basic knowledge.
E02	Capacity for multidisciplinary consideration of an environmental problem
E03	Awareness of the temporal and spatial dimensions of environmental processes
E04	Ability to integrate experimental evidence found in field and/or laboratory studies with theoretical knowledge.
E05	Capacity for qualitative data interpretation
E06	Capacity for quantitative data interpretation
E07	Capacity to plan, manage and conserve natural resources
E12	Ability to manage Geographic Information Systems
E13	Ability to handle software.
E18	Capacity to manage the natural environment
E20	Capacity to plan and carry out actions to restore the natural environment
G01	Proficiency in a second foreign language at level B1 of the Common European Framework of Reference for Languages.
G02	Knowledge of Information and Communication Technologies (ICT).
G03	Good oral and written communication

5. Objectives or Learning Outcomes

Course learning outcomes

Description

Understand the responses of organisms, ecosystems and landscapes to fire.

Know the techniques and measures for fire prevention and firefighting.

Understand the phenomenon of forest fires, their global significance and their role in ecosystems.

Acquire basic criteria and techniques useful for the management of ecosystems affected by fires.

Understand the physical and chemical processes of the combustion phenomenon.

Know the risk factors that determine the occurrence of fires.

6. Units / Contents

Unit 1:

Unit 1.1

Unit 1.2

Unit 2:

Unit 2.1

Unit 2.2

Unit 2.3

Unit 2.4

Unit 3:

Unit 3.1

Unit 3.2

Unit 3.3

Unit 3.4

Unit 3.5

Unit 4:

Unit 4.1

Unit 4.2

7. Activities, Units/Modules and Methodology

Training Activity	Methodology	Related Competences (only degrees before RD 822/2021)	ECTS	Hours	As	Com	R	Description
Class Attendance (theory) [ON-SITE]	Lectures	E01 E02 E03 E07 E18 E20 G01	0.76	19	N	-	-	
Study and Exam Preparation [OFF-SITE]	Self-study	CB03 E01 E02 E03 E05 E06 G01	0.92	23	N	-	-	
Workshops or seminars [ON-SITE]	Cooperative / Collaborative Learning	CB02 CB04 E13 E20 G01 G02 G03	0.4	10	Y	Y	Y	
Other off-site activity [OFF-SITE]	Self-study	CB03 E01 E02 E03 E05 E06 E20 G01 G02 G03	0.8	20	N	-	-	
Class Attendance (practical) [ON-SITE]	Practical or hands-on activities	CB03 E01 E02 E03 E04 E05 E06 E07 E12 E13 E18	0.6	15	Y	Y	N	
Practicum and practical activities report writing or preparation [OFF-SITE]	Self-study	CB02 CB03 CB04 E01 E02 E03 E04 E05 E06 E12 E13 G03	0.9	22.5	Y	Y	Y	
Progress test [ON-SITE]	Assessment tests	CB03 E01 E02 E03 E05 E06 E20 G03	0.04	1	Y	N	N	
Final test [ON-SITE]	Assessment tests	CB03 E01 E02 E03 E05 E06 E20 G03	0.08	2	Y	Y	Y	
Total:			4.5	112.5				
Total credits of in-class work: 1.88			Total class time hours: 47					
Total credits of out of class work: 2.62			Total hours of out of class work: 65.5					

As: Assessable training activity

Com: Training activity of compulsory overcoming

R: Rescheduling training activity

8. Evaluation criteria and Grading System

Evaluation System	Grading System		Description
	Face-to-Face	Self-Study Student	
Practicum and practical activities reports assessment	25.00%	0.00%	
Final test	55.00%	0.00%	
Other methods of assessment	20.00%	0.00%	
Total:	100.00%	0.00%	

9. Assignments, course calendar and important dates

Not related to the syllabus/contents

Hours	hours
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10. Bibliography and Sources

Author(s)	Title/Link	Publishing house	Citv	ISBN	Year	Description
Arnaldos, J., et al.	Manual de ingeniería básica para la prevención y extinción de incendios forestales	Mundi-Prensa			2004	
Bond, W.J. y Van Wilgen, B.W.	Fire and Plants	Springer			1996	

Keeley, J.E., et al.	Fire in Mediterranean Ecosystems	Cambridge University Press	2012
Pausas, J.G.	Incendios Forestales, una introducción a la ecología del fuego	CSIC	2012
Vélez, R.	La defensa contra incendios forestales: fundamentos y experiencias	McGraw-Hill	2000
Whelan, R.J.	The Ecology of Fire	Cambridge University Press	1995